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(54) RECEPTACLE FOR FOOD PRODUCT TO BE COOKED, PREFERABLY BY MEANS OF STEAM

(57) The present invention refers to a receiving device for a cooking product to be treated by heat, preferably by means of steam, comprising a container with a base in which a receptacle for a cooking product to be treated by heat is arranged in said container spaced from said base, and a cover of said container. It is provided for according to the present invention that said receptacle (8) for a cooking product to be treated by heat comprises a base (11) which is provided at its outer side with at least one outer spacer (13), and is provided at its inner side with at least one inner spacer (14), and a cover (9). Said receptacle (8) is formed at its end which cooperates with the cover (9) over the entire circumference with a groove (16) which is configured to receive liquid.

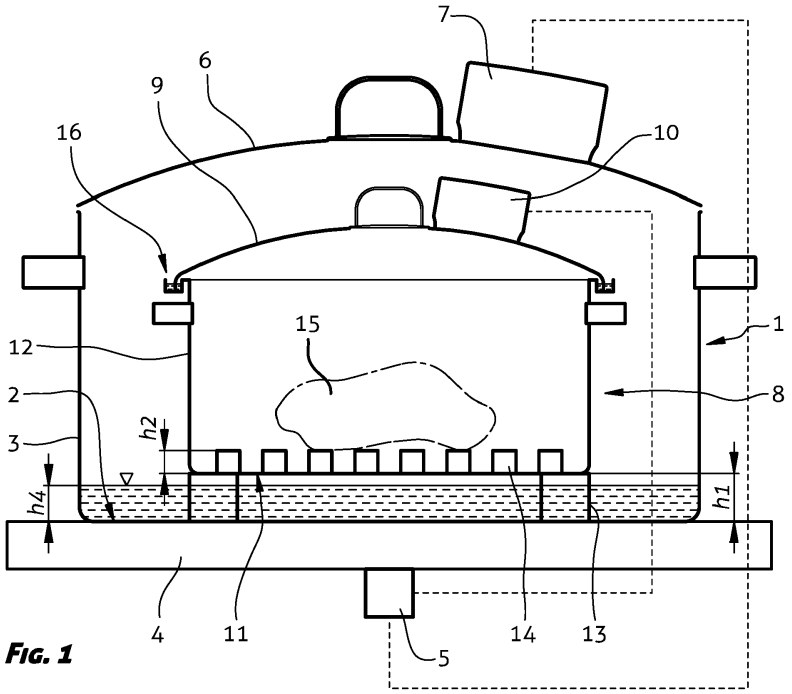

Fig. 1

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Description

[0001] The present invention refers to a receiving device for a cooking product to be treated by heat, preferably by means of steam, comprising a container with a base in which a receptacle for a cooking product to be treated by heat is arranged in said container spaced from said base, and a cover of said container.

[0002] A receiving device has been disclosed in a publication of a patent application No. DE 10 2012 102 677 A1 comprising a container with a base and a wall surrounding the base, where the container has a bearing unit at an inner surface. A cooking product carrier is superposable such that it is fully received in the container, and a minimum distance is ensured by means of said carrier between the base surface of the container and the lower side of the cooking product carrier. Furthermore, said know solution provides for that both the container and the cooking product receptacle are covered by a single cover, resulting in the liquid originating during heat treatment of the cooking product condenses and drops onto the cooking product which is rather unwanted effect during heat treatment by means of steam.

[0003] It is the object of the present invention to create a receiving device for a cooking product to be treated by heat, preferably by means of steam, which remedies the above mentioned drawbacks.

[0004] According to the present invention, the object as set above is solved by features set forth in a characterizing part of claim 1. Detail of the invention is discloses in relevant subclaims.

[0005] The invention is further described in detail by way of non-limiting embodiment, and with a reference to the accompanying drawing, where

Fig. 1 shows a schematic view of a receiving device according to the invention,

Fig. 2 shows a schematic view of a cover of the device of Fig. 1.

[0006] Receiving device according to the invention comprises a container 1 having a base 2 and a wall 3 surrounding said base. Heat is delivered to said container 1 through the base 2 by means of a heating device 4 which is controlled by means of a first control unit 5 such as a temperature sensor for instance. Said container 1 is closed with a first cover 6, the latter being optionally provided with a second control unit 7 such as a temperature sensor for instance. Furthermore, said receiving device according to the invention comprises a receptacle 8 for a cooking product to be treated by heat which is closed with a second cover 9, the latter being optionally provided with a third control unit 10 such as a temperature sensor for instance. Said control units 5, 7, 10 are preferably linked to each other by means of a data and/or signal links.

[0007] Said receptacle 8 for a cooking product to be treated by heat comprises a base 11 and a wall 12 surrounding said base 11. Said base 11 of the receptacle 8 is provided at its outer side with at least one outer spacer 13 comprising a height h_1 by means of which there is enabled a constant distance of the receptacle 8 from the base 2 of the container 1, when the receptacle 8 is received within the container 1. Furthermore, said base 11 of the receptacle 8 is provided at its inner side, i.e. inside the receptacle 8, with at least one inner spacer 14, preferably with a plurality of inner spacers 14 comprising a height h_2 by means of which there is enabled a constant distance of a cooking product 15 to be treated by heat from the base 11 of the receptacle 8. Said inner spacers 11 which can resemble an arbitrary wave form with peaks and troughs can be formed as an integral part of the base 11, or as a separate element that can be inserted, together with the cooking product 15 to be treated by heat, into the receptacle 8 or removed therefrom.

[0008] Said receptacle 8 is formed at its end being spaced from the base 11 and cooperating with the second cover 9 with a groove 16 which extends over the entire circumference of said receptacle. Furthermore, it is provided for according to the present invention that said second cover 9 is formed at its free boundary area 17 cooperating with the receptacle 8 and, respectively, with said groove 16, with at least one cut-out 18, preferably with a plurality of cut-outs 18. Said cut-outs 18 are arranged over the circumference of the boundary area 17 either in equal or arbitrary mutual distances. Preferably, the height h_3 of each cut-out 18 is smaller than the depth of said groove 16.

[0009] A process of heat treatment of the cooking product in the receiving device according to the present invention is carried out in the following manner. The receptacle 8 with the cooking product 15 to be treated by heat is placed in the container 1 arranged on the heating device 4. The cooking product 15 is placed on said plurality of the inner spacers 14 and spaced from the base 11 of the receptacle 8, in order for the cooking product does not come into contact with liquid that might drip from the cooking product 15 during heat treatment. The base of said receptacle 8 is arranged by means of said at least one outer spacer 13 in the distance h_1 drom the base 2 of the container 1. Liquid, preferably water is poured into said container 1 up to the height h_4 which is smaller than said distance h_1, so that between the liquid level and the base 11 of the receptacle 8 there is always provided sufficient space for steam circulation. Afterwards, liquid, preferably water is filled into said groove 16 on the receptacle 8, and the latter is closed and, respectively, covered by means of said second cover 9. Here, said cut-outs 18 in the second cover 9 are entirely submerged in said liquid in the groove 16. Finally, the container 1 is closed by means of the first cover 6.

[0010] Delivering heat energy from the heating device 4 the liquid in the container 1 evaporates, thus, an environment with wet steam is created inside the container 1 surrounding the receptacle 8. Said wet steam entirely surrounds the receptacle 8 emitting heat energy to the

cooking product 15 to be treated by heat placed in the receptacle 8. As a rule, due to warming up said cooking product 15 secrets juices that pool in the base 11 of the receptacle 8, and as a result pressure of evaporated juices of the cooking product 15 may increase. The pressure inside the receptacle 8 increased in this manner pushes excess steam through the liquid in the groove 16 and through said cut-outs 18 in the second cover 9 into the container 1. When the pressure of wet steam in the container 1 increases beyond acceptable degree, said increased pressure lifts the first cover 6 of the container 1 and the excessive wet steam escapes into surrounding, resulting in a pressure drop inside the container 1.

Claims

1. A receiving device for a cooking product to be treated by heat, preferably by means of steam, comprising a container with a base in which a receptacle for a cooking product to be treated by heat is arranged in said container spaced from said base, and a cover of said container, ***characterized in that*** said receptacle (8) for a cooking product to be treated by heat comprises a base (11) which is provided at the outer side thereof with at least one outer spacer (13), and a cover (9).

2. A receiving device according to claim 1, ***characterized in that*** said outer spacers (13) comprising a height (h_1) enable constant space of the receptacle (8) from the base (2) of a container (1).

3. A receiving device according to claims 1 and 2, ***characterized in that*** said base (11) is provided at the inner side thereof with at least one inner spacer (14), preferably with a plurality of the inner spacers (14).

4. A receiving device according to claims 1 to 3, ***characterized in that*** said plurality of the inner spacers (14) comprising a height (h_2) enable constant space of a cooking product (15) to be treated by heat from the base (11) of the receptacle (8).

5. A receiving device according to claim 1, ***characterized in that*** said inner spacers (14) can resemble an arbitrary wave form with peaks and troughs.

6. A receiving device according to any claim 1 to 4, ***characterized in that*** said inner spacers (14) can be formed as integral part of the base (11) or as separate element insertable in the receptacle (8) or removable therefrom.

7. A receiving device according to any claim 1 to 5, ***characterized in that*** said receptacle (8) is formed at its end which cooperates with the cover (9) over the entire circumference with a groove (16) which is configured to receive liquid, wherein said cover (9) comprises a boundary area (17) which cooperates with the groove (16).

8. A receiving device according to any claim 1 to 6, ***characterized in that*** the boundary area (17) of the cover (9) is formed with at least one cut-out (18) the height (h_3) thereof is smaller than the depth of said groove (16).

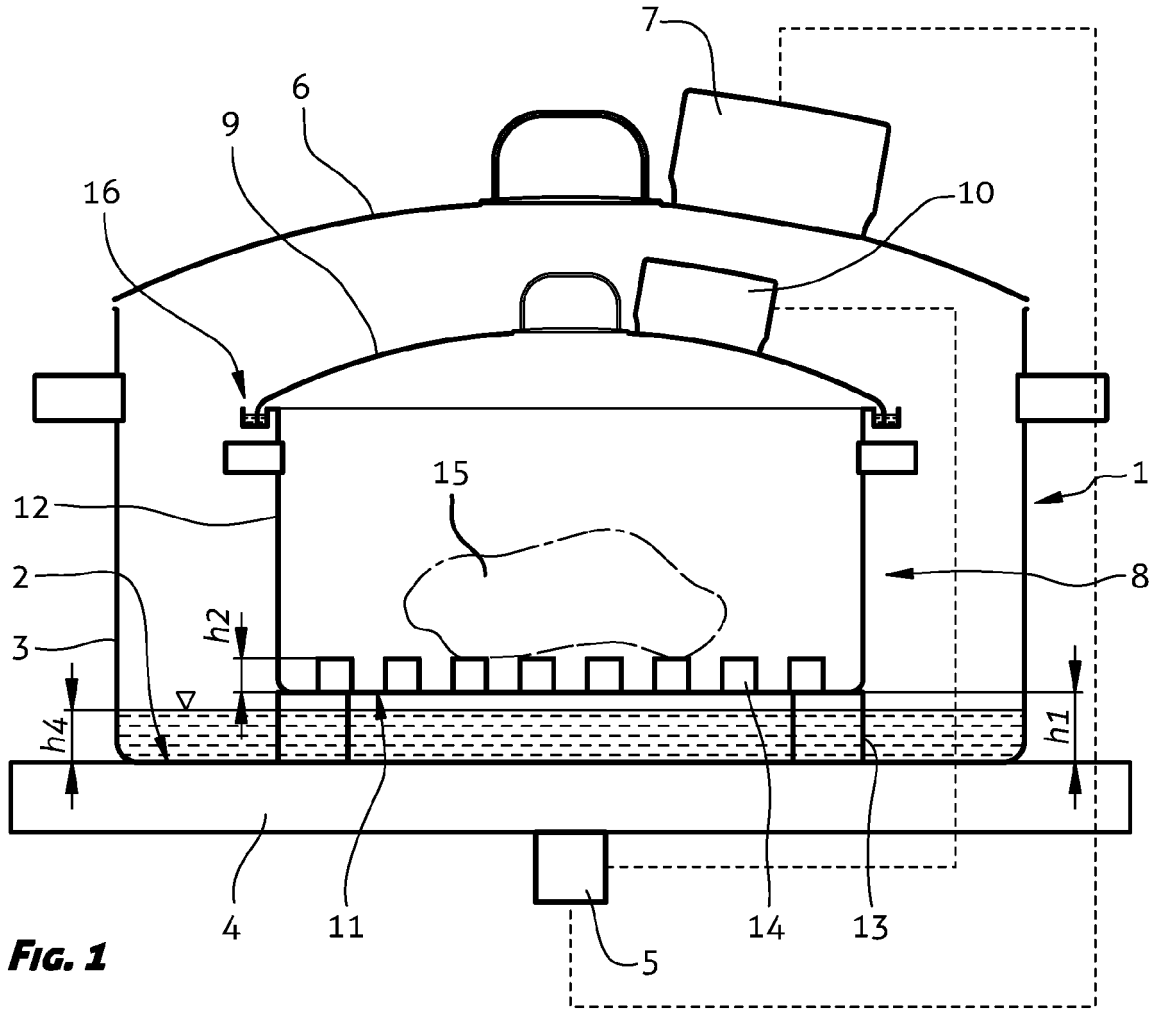

FIG. 1

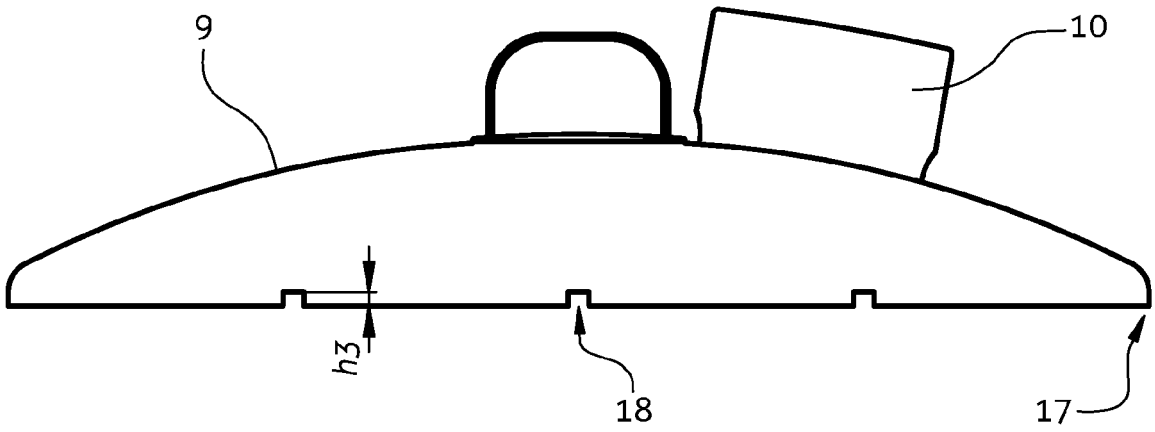

FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 16 16 0100

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 4 462 308 A (WANG GUNG H [US]) 31 July 1984 (1984-07-31)	1,2	INV. A47J27/04
Y	* abstract; figure 6 * * column 4, line 41 - line 51 * -----	3-8	ADD. A47J36/08
Y	US 1 922 419 A (COULSTON EARL V) 15 August 1933 (1933-08-15)	3-6	
A	* abstract; figures 1-4 * -----	1,2,7,8	
Y	US 5 320 028 A (GRUNBERG DANIEL [US]) 14 June 1994 (1994-06-14)	7,8	
A	* abstract; figures 1,2 * * column 5, line 1 - line 18 * -----	1-6	
X	US 4 649 811 A (MANGANESE JEAN L [CA]) 17 March 1987 (1987-03-17)	1,2	
A	* abstract; figure 2 * * column 1, line 20 - line 28 * -----	3-8	

TECHNICAL FIELDS SEARCHED (IPC)

A47J

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	27 September 2016	Schnitzhofer, Markus

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 16 16 0100

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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27-09-2016

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US 4462308 A	31-07-1984	NONE	
US 1922419 A	15-08-1933	NONE	
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US 4649811 A	17-03-1987	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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